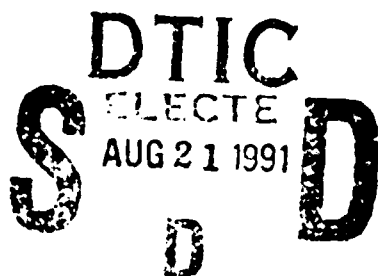


AD-A239 915



Research Product 91-10

# User's Guide for the MANPRINT Reference Retrieval System



91-08304



April 1991

ARI Aviation R&D Activity at Fort Rucker, Alabama  
Systems Research Laboratory

U.S. Army Research Institute for the Behavioral and Social Sciences

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## REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

REPORT SECURITY CLASSIFICATION Unclassified		1b RESTRICTIVE MARKINGS --																						
SECURITY CLASSIFICATION AUTHORITY		3 DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.																						
DECLASSIFICATION/DOWNGRADING SCHEDULE																								
PERFORMING ORGANIZATION REPORT NUMBER(S) Research Product 91-10		5 MONITORING ORGANIZATION REPORT NUMBER(S) --																						
NAME OF PERFORMING ORGANIZATION AVSCOM Element	6b OFFICE SYMBOL (if applicable) PERI-IRA	7a NAME OF MONITORING ORGANIZATION ARI Aviation R&D Activity																						
ADDRESS (City, State, and ZIP Code) 100 Goodfellow Boulevard St. Louis, MO 63120-1798		7b ADDRESS (City, State, and ZIP Code) ATTN: PERI-IR Fort Rucker, AL 36362-5354																						
NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Research Institute for the Behavioral and Social Sciences	8b OFFICE SYMBOL (if applicable) PERI-3	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER --																						
ADDRESS (City, State, and ZIP Code) 01 Eisenhower Avenue Alexandria, VA 22333-5600		10 SOURCE OF FUNDING NUMBERS <table border="1"><tr><td>PROGRAM ELEMENT NO 63007A</td><td>PROJECT NO 793</td><td>TASK NO 1210</td><td>WORK UNIT ACCESSION NO H1</td></tr></table>		PROGRAM ELEMENT NO 63007A	PROJECT NO 793	TASK NO 1210	WORK UNIT ACCESSION NO H1																	
PROGRAM ELEMENT NO 63007A	PROJECT NO 793	TASK NO 1210	WORK UNIT ACCESSION NO H1																					
TITLE (Include Security Classification) User's Guide for the MANPRINT Reference Retrieval System																								
PERSONAL AUTHOR(S) Winter, David R.																								
11 TYPE OF REPORT Final	13b TIME COVERED FROM 88/10 TO 90/08	14 DATE OF REPORT (Year, Month, Day) 1991, April	15 PAGE COUNT																					
SUPPLEMENTARY NOTATION																								
<table border="1"><tr><th colspan="3">COSATI CODES</th></tr><tr><th>FIELD</th><th>GROUP</th><th>SUB-GROUP</th></tr><tr><td>05</td><td>08</td><td></td></tr><tr><td>05</td><td>09</td><td></td></tr></table>		COSATI CODES			FIELD	GROUP	SUB-GROUP	05	08		05	09		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) <table><tr><td>Database</td><td>Personnel</td><td>Health hazards</td></tr><tr><td>Human factors</td><td>Training</td><td>MANPRINT</td></tr><tr><td>Manpower</td><td>Safety</td><td></td></tr></table>		Database	Personnel	Health hazards	Human factors	Training	MANPRINT	Manpower	Safety	
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ABSTRACT (Continue on reverse if necessary and identify by block number) This report describes the installation and use of the MANPRINT Reference Retrieval System (MANRRS). MANRRS is a menu-driven system used for the identification of references related to one or more of the domains subsumed by MANPRINT. MANRRS includes both a database with indexed entries on MANPRINT domain and record type (i.e., regulation, standard, technical report, etc.) and the retrieval software program written in dBase III command language. A valid copy of dBase III Plus is required to use MANRRS.																								
DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION Unclassified																						
NAME OF RESPONSIBLE INDIVIDUAL Charles A. Gainer		22b. TELEPHONE (Include Area Code) (205) 255-4404	22c. OFFICE SYMBOL PERI-IR																					

**Research Product 91-10**

# **User's Guide for the MANPRINT Reference Retrieval System**

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**Office, Deputy Chief of Staff for Personnel**  
**Department of the Army**

**April 1991**

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**Army Project Number**  
**2Q263007A793**

**Human Factors In Training**  
**Operational Effectiveness**

Approved for public release; distribution is unlimited.

## FOREWORD

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With the Manpower and Personnel Integration (MANPRINT) initiative, the Army made great strides in ensuring that the policy "equip the man" and not "man the equipment" will be followed in future systems. In the development and acquisition of virtually every new system, MANPRINT is a major consideration. Provisions for analyses of each of the six MANPRINT domains and for the development and execution of comprehensive MANPRINT management programs are included in the solicitation documents for new systems. In addition, System MANPRINT Management Plans are formulated by Army personnel to ensure that all problems and questions that might arise with respect to MANPRINT issues for a new system are addressed and resolved. But despite the comprehensive training provided to MANPRINT action officers, the identification of relevant references (such as regulations and standards) and tools that should be noted in these documents is often difficult.

The MANPRINT Reference Retrieval System (MANRRS) has been created to alleviate some of that difficulty. MANRRS reduces the burden of those who prepare the documentation for MANPRINT by identifying relevant references for each of the MANPRINT domains. While this version of MANRRS does not reproduce the content of the itemized references, it does provide a ready means for identification of the needed references, along with a listing of the source.

A previous version (1.0) of this product was provided to the Aviation Systems Command (AVSCOM) program management offices and other Army elements concerned with MANPRINT implementation. Suggestions for improvement received from those offices are incorporated into this version (2.0). This guide will be provided to the Crew Station Ergonomics Information Analysis Center for distribution.

This product was developed by the AVSCOM element of the Army Research Institute Aviation Research and Development Activity under research task 1210, "Reducing Aviator and Maintainer Requirements in Next Generation Army." The applicable memorandum of understanding is entitled "Establishment of Technical Coordination between ARI and AVSCOM," dated 10 April 1985.



EDGAR M. JOHNSON  
Technical Director

# USER'S GUIDE FOR THE MANPRINT REFERENCE RETRIEVAL SYSTEM

## CONTENTS

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	Page
INTRODUCTION . . . . .	1
INSTALLATION INSTRUCTIONS . . . . .	2
HOW TO USE MANRRS . . . . .	3
USER REGISTRATION . . . . .	7
USER FEEDBACK . . . . .	7
APPENDIX A. DATABASE LISTING . . . . .	A-1
B. PROGRAM LISTING . . . . .	B-1

## LIST OF FIGURES

Figure 1. MANRRS main menu . . . . .	3
2. Record category selection menu . . . . .	4
3. Output selection menu . . . . .	5
4. Individual record output menu . . . . .	6

# USER'S GUIDE FOR THE MANPRINT REFERENCE RETRIEVAL SYSTEM

## Introduction

The MANPRINT Reference Retrieval System (MANRRS) is designed to assist in locating documents and other reference materials relevant to MANPRINT. It is primarily intended to be used by those implementing MANPRINT programs, developing System MANPRINT Management Plans, or developing statements for inclusion in acquisition documents (Statements of Work, Contract Data Requirements Lists, etc.). MANRRS consists of a database (partially listed in Appendix A) and a retrieval program (listed in Appendix B) written in the dBase III<sup>1</sup> command language.

## Database Entries

Each record in the database consists of the title of the document or product, any identifying number (such as an Army Regulation number or technical report number), the date it was published or produced, a point of contact or source for items not commonly available, and space for comments. In addition, each record has a set of flags indicating the relevant MANPRINT domain(s) and the record category (i.e., regulation, report, handbook, etc.).

## Record Indexing

The database includes items in the following record categories:

- Regulations
- Pamphlets and Circulars
- Technical Reports and Guides
- MIL Handbooks
- MIL Standards
- MIL Specifications
- Data Item Descriptions
- Analytic Techniques
- Databases

Besides being indexed on these categories, all the references in the database are also indexed on MANPRINT domain. In addition, there is a general domain category for those references that are not directly related to any particular MANPRINT domain.

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1. dBase and dBase III Plus are trademarks of Ashton-Tate.

## Retrieval

MANRRS allows the user to retrieve references for specific MANPRINT domains and record categories. For example, a user might select all Regulations dealing with Manpower for retrieval, or all MIL Handbooks dealing with Human Factors.

### Installation Instructions

NOTE: You must have a copy of dBase III Plus in order to use MANRRS.

The following assumes that you have installed dBase on your computer in a directory called C:\DBASE. If you have installed dBase in another directory, simply change all the references to C:\DBASE given below to whatever your directory is called.

1. Place the floppy disk containing MANRRS in the floppy disk drive.
2. Copy the contents of the MANRRS disk into the dBase directory.
  - a. From the MS-DOS Prompt 'C>' type cd c:\dbase <enter>
  - b. From the MS-DOS Prompt 'C>' type copy a:\*. \* <enter>
  - c. After you press <enter> the floppy disk light will come on and the disk will make some noise. You will then see a list of the files being copied from the floppy disk to your hard disk. The list will include the following:

MANRRS.PRG  
MANRRS.DBF  
REPORT.TXT (Which contains this User's Guide)

3. You may now remove the floppy disk from the floppy disk drive.
4. To start MANRRS, you must first start the dBase III program. If you are not familiar with dBase, you may wish to briefly review the dBase manual before beginning. However, the steps included in this User's Guide should be sufficient to get you started.
  - a. Be sure you are in the dBase directory:  
C> cd c:\dbase <enter>
  - b. Start dBase: C> dbase <enter>



c. Press the ESC key to get to the dot prompt. After you have the dot prompt, then type the following:

do manrrs <enter>

d. You will then see the MANRRS Main Menu and are ready to use MANRRS.

### How to Use MANRRS

#### Selecting Records

The operation of MANRRS is menu driven. The first menu you will see is the MAIN MENU, shown in Figure 1. MANRRS will initially review the database and display the number of records indexed on each MANPRINT category. You may note that the sum of these entries will be more than the total number of records in the database because many records are related to more than one MANPRINT category, and thus are counted twice or more.

Army Research Institute MANPRINT Reference Retrieval System (V2.0)			
MANPRINT CATEGORY		RECORD CATEGORY	
	INDEX COUNT		INDEX COUNT
A...MANPOWER	20	A...REGULATIONS	
B...PERSONNEL	22	B...PAMS & CIRCULARS	
C...TRAINING	37	C...REPORTS & GUIDES	
D...HUMAN FACTORS	61	D...MIL HANDBOOKS	
E...HEALTH HAZARD	12	E...MIL STANDARDS	
F...SYSTEM SAFETY	20	F...MIL SPECIFICATIONS	
G...GENERAL	79	G...DATA ITEM DESCRIPTIONS	
		H...ANALYTIC TECHNIQUES	
		I...DATABASES	
Z...ALL RECORDS	197	Z...ALL RECORDS	
CATEGORY SELECTED:		CATEGORY SELECTED:	
Enter letter for MANPRINT Category:			
Press Q to QUIT; Press X to CANCEL			

Figure 1. MANRRS main menu.

From the MAIN MENU select one of the MANPRINT categories by entering the associated letter (A-G). Entering Z will select all MANPRINT categories. If at any time you want to quit MANRRS, then enter a Q. MANRRS will verify that you really want to quit, and will then terminate the program, returning you to the MS-DOS prompt.

After a MANPRINT category is selected, MANRRS will count the number of records in that category for each of the record categories (ie., regulations, manuals, etc.) and will display that information on the right hand side of the screen. Figure 2 shows what happens after the Manpower category was selected. From this display we can see that there are 9 regulations dealing with Manpower, 2 MIL standards, 1 data item description, and so on.

Army Research Institute MANPRINT Reference Retrieval System (V2.0)			
MANPRINT CATEGORY		RECORD CATEGORY	
	INDEX COUNT		INDEX COUNT
A...MANPOWER	20	A...REGULATIONS	9
B...PERSONNEL	22	B...PAMS & CIRCULARS	0
C...TRAINING	37	C...REPORTS & GUIDES	1
D...HUMAN FACTORS	61	D...MIL HANDBOOKS	1
E...HEALTH HAZARD	12	E...MIL STANDARDS	2
F...SYSTEM SAFETY	20	F...MIL SPECIFICATIONS	0
G...GENERAL	79	G...DATA ITEM DESCRIPTIONS	1
		H...ANALYTIC TECHNIQUES	5
		I...DATABASES	1
Z...ALL RECORDS	197	Z...ALL RECORDS	20
CATEGORY SELECTED: A		CATEGORY SELECTED:	
Enter letter for Record Category:			
Press Q to QUIT; Press X to CANCEL			

Figure 2. Record category selection menu.

To obtain information on the entries for a particular record category, enter the letter (A-I) associated with that category, or enter Z to obtain the information for all categories. For example, if you wanted to review all the regulations concerned with manpower, then you would enter the letter A.

As shown in Figure 3, three options are available for output of the records you have selected:

1. You may view them one at a time on the screen
2. You may send them all to the printer
3. You may save them all to a disk file

Should you choose the latter option (save to disk file), then MANRRS will save all the selected records to a temporary file called "C:\temp\$\$\$.txt". NOTE: Be sure to rename this file before using MANRRS again, since it will be erased and reused.

The screenshot shows a menu titled "Army Research Institute MANPRINT Reference Retrieval System (V2.0)". Below the title is a box labeled "OUTPUT OPTIONS" containing three choices: "A...VIEW ONE AT A TIME ON SCREEN", "B...SEND ALL TO PRINTER", and "C...SAVE ALL TO DISK". At the bottom of the screen, there is a prompt "Enter letter for your choice:" followed by a horizontal line, and below that, the instruction "Press Q to QUIT; Press X to CANCEL".

```

      Army Research Institute
    MANPRINT Reference Retrieval System (V2.0)

  OUTPUT OPTIONS

  A...VIEW ONE AT A TIME ON SCREEN
  B...SEND ALL TO PRINTER
  C...SAVE ALL TO DISK

Enter letter for your choice:
Press Q to QUIT; Press X to CANCEL

```

Figure 3. Output selection menu.

Should you choose to view the records one at a time on the screen, then you will see the menu shown in Figure 4. This display shows the content of the selected record (in this case information about AR 71-2). You are also given three choices:

1. You may go on to the next record
2. You may send the current record to the printer
3. You may save the current record to a disk file

Should you choose the latter option, then the same cautions apply as were mentioned before regarding renaming of the file.

At any point during this process you may elect to terminate your MANRRS session by pressing Q (Quit). Or, you may return to the main menu by pressing X (Cancel present operation).

**Army Research Institute**  
**MANPRINT Reference Retrieval System (V2.0)**

**OUTPUT OPTIONS**

A...VIEW NEXT RECORD ON SCREEN  
B...SEND THIS RECORD TO PRINTER  
C...SAVE THIS RECORD TO DISK

Title : Basis of Issue Plans (BOIP), Qualitative and  
: Quantitative Personnel Requirements Information (QQPRI)  
Date : ID Number: AR 71-2  
POC :  
:  
:  
Comments :  
:  
:  
  
Enter letter for your choice:  

---

Press Q to QUIT; Press X to CANCEL

Figure 4. Individual record output menu.

### User Registration

No restriction is placed upon the duplication or distribution of MANRRS. However, users are encouraged to register in order to obtain updates to the data base and the retrieval program.

To register as a MANRRS user, simply send your name, organization, address, telephone number, and MANRRS Version Number (from the MAIN MENU Screen) to:

Chief, US Army Research Institute  
AVSCOM Element  
ATTN: PERI-IRA  
4300 Goodfellow Blvd.  
St. Louis, MO 63120-1798

Telephone Numbers: (314) 263-2407, AUTOVON 693-2407.

### User Feedback

User comments are encouraged. If you notice references that are missing from the data base, if you have trouble getting MANRRS to work, or if you have a suggestion for improvements, please send them to the address given above.

## APPENDIX A

### DATABASE LISTING

A Concept for Developing Human Performance Specifications  
HEL TM 7-80  
A Systems Approach to Training TRADOC Reg. 350-7  
Acoustical Noise Limits in Helicopters MIL-STD-1294  
Aircrew Protection Requirements Nonnuclear Weapons Threat  
MIL-STD-1288  
Aircrew Station Geometry for Military Aircraft MIL-STD-1333B  
Aircrew Station Signals MIL-STD-411D  
Aircrew Station Controls and Displays: Assignment Location, and  
Actuation, for Fixed Wing Aircraft MIL-STD-203F  
Aircrew Station Lighting for Compatibility with Night Vision  
Goggle Use ADS-23  
Aircrew Station Vision Requirements for Military Aircraft  
MIL-STD-850(Draft)  
Airworthiness Qualification Data DI-E-1134  
Anthropometry of US Military Personnel DOD-HDBK-743  
ANVIS Capability Lighting Data DI-MISC-80113  
Army Safety Program AR 385-10  
Army Modernization Training AR 350-35  
Army Manpower Cost System (AMCOS)  
Army Training AR 350-1  
Audio Visual Aids DI-H-7072  
Basic Policies for Systems Acquisition AR 1000-1  
Basis of Issue Plans, Qualitative and Quantitative Personnel  
Requirements Information (QQPRI) AR 71-2  
Catalogue of MANPRINT Methods  
Coating, Reflection Reducing for Instrument Cover Glasses and  
Lighting Wedges MIL-C-14806A  
COMBIMAN  
Commissioned Officer Specialty Classification System AR 611-101  
Comprehensibility Standards for Technical Manuals (Metric)  
DOD-STD-1685(SH)  
Computer Program Development Plan DI-S-30567A  
Contract Training Programs MIL-STD-1379B  
Control of Potential Hazards to Health from Microwave and Radio  
Frequency Radiation AR 40-583  
Control and Recording Procedures for Exposure to Ionizing  
Radiation and Radioactive Materials AR 40-14  
Control of Health Hazards from Lasers and Other High Intensity  
Optical Sources AR 40-46  
Crew Requirements Definition  
Crew Systems Traceability Report DI-S-3590  
CREWCHIEF  
Crewstation Assessment of Reach  
Critical Task Analysis Report DI-H-7055  
Crosswalk  
Data Collection Analysis, Correction Reports DI-R-7105

Data Base Design Document DI-S-2140A  
 Data Requirements for Development, Acquisition, and Update of  
 Technical Manuals MIL-STD-1790A  
 Depot Maintenance Study Report DI-S-1815  
 Design Test Plan DI-T-1901  
 Desk Top Human Factors Assistant  
 Directed Energy Survivability Report DI-R-1788  
 Dispersers, Airbourne, Submunitions, Safety MIL-STD-1455A  
 Displayed Messages for Automatic Test Equipment MIL-STD-334  
 Early Comparability Analysis (ECA) Procedural Guide  
 Electronic Aids to Maintenance  
 Electronically or Optically Generated Displays for Aircraft  
 Control and Combat Cue Information Engineer MIL-STD-884C  
 Engineering Data Compendium Human Perception and Performance  
 Enlisted Career Management Fields and Military Occupational  
 Specialties AR 611-201  
 Explosive Hazard Classification Data DI-H-1321B  
 Footprint  
 Format Requirements for Scientific and Technical Reports  
 MIL-STD-847B  
 Functionally Oriented Maintenance Manuals MIL-HDBK-242  
 Handbook for Quantitative Analysis of MANPRINT Considerations in  
 Army Systems  
 Handbook of Perception and Human Performance Vol 1 & 2: Sensory  
 Process and Perception  
 HARDMAN  
 Health and Environment AR 40-5  
 Health Hazard Assessment Program in Support of the Army Materiel  
 Acquisition Decision Process AR 40-10  
 HF,MPT Clauses for CE and Dem/Val RFP ARI RP 84-24  
 Human Engineering Guide to Equipment Design  
 Human Operator Simulation IV (HOS IV)  
 Human Factors Engineering Material for Manpower and Personnel  
 Integration (MANPRINT) in RFP HEL TM 13-86  
 Human Factors Engineering Data Management Handbook HEL TM 6-87  
 Human Engineering Requirements for Measurement of Operator  
 Workload ADS-30  
 Human Engineering Test Report DI-H-7058  
 Human Engineering Design Approach Document Maintainer DI-H-7057  
 Human Engineering Design Approach Document - Operator DI-H-7056  
 Human Engineering Test Plan DI-H-7053  
 Human Engineering Program Plan DI-H-7051  
 Human Factors Engineering for Army Materiel MIL-HDBK-759  
 Human Engineering Guidelines for Management Information Systems  
 MIL-HDBK-761  
 Human Engineering Dynamic Simulation Plan DI-H-7052  
 Human Engineering System Analysis Report DI-H-7054  
 Human Engineering Design Criteria for Military Systems,  
 Equipment, and Facilities MIL-STD-1472  
 Human Engineering Requirements for Military Systems, Equipment,  
 and Facilities MIL-H-46855  
 Human Factors Engineering Design Criteria for Helicopter Cockpits

MIL-STD-1295A  
 Human Engineering Progress Report DI-H-7059  
 Human Factors Engineering Program AR 602-1  
 I Am the American Soldier USASSC-FC-21-451  
 Implementing Embedded Training (Ten Volume Set)  
 Initial Entry Training Fill Policy and Procedures  
     TRADOC Reg. 350-17  
 Instructor Handbook DI-H-7076  
 Instructor/Lesson Guides - Training Course DI-H-7070  
 Integrated Logistic Support Manager's Guide DA PAM 700-127  
 Integrated Logistics Support AR 700-127  
 Interservice Procedures for Instructional Development  
     TRADOC PAM 350-30  
 Ionizing Radiation Protection, Licensing, Control, Transportation  
     Disposal and Radiation Safety AR 385-11  
 Job Assessment Software System  
 Keyboard Arrangements MIL-STD-1280  
 Life Cycle System Management Model for Army Systems DA PAM 11-25  
 Light Fixed and Rotary-Wing Aircraft Crashworthiness MIL-STD-1290  
 Lighting Equipment, Aircraft, General Specification for  
     Installation of MIL-L-6503H  
 Lighting, Aircraft Interior, Installation of MIL-L-18276C  
 Logistic Support Analysis/Record MIL-STD-1388 1A/2A  
 LSA Techniques Guide AMC PAM 700-4  
 Maintainability Report DI-R-7113  
 Maintainability Test Plan DI-R-7112  
 Maintainability Status Report DI-R-7104  
 Maintainability Prediction MIL-HDBK-472  
 Maintainability Analysis Report DI-R-7109  
 Maintenance Training Simulators, General Specification for  
     MIL-M-87228  
 MANCAP  
 Manpower, Personnel, & Training Analysis Reports DI-ILSS-8007  
 Manpower and Personnel Integration (MANPRINT) AR 602-2  
 Manpower and Personnel Integration TRADOC-AMC PAM 70-2  
 Manpower Staffing, Standards System AR 570-5  
 Manpower and Personnel Integration Guide TRADOC-AMC PAM 602-xxx  
 Manpower and Equipment Control-Manpower Requirement Criteria  
     Table of Organization and Equipment AR 570-2  
 Manpower and Equipment Control - Commissioned Officer Position  
     Criteria AR 570-1  
 Manpower Management AR 570-4  
 Manpower and Personnel Integration Materials for AMC/TRADOC  
 Manpower and Personnel Integration (MANPRINT) TRACOC-CIR-602-XXX  
 MANPRINT Primer  
 MANPRINT in the Source Selection Process  
 MANPRINT Handbook for RFP Development AMC CIR 602-X, Supp 1  
 MANPRINT Risk Assessment  
 MANPRINT On-Line  
 MANPRINT Database  
 Manual of Warrant Officer Military Occupational Specialties  
     AR 611-112



Manual with Supplementary Data, Technical: Commercial Equipment  
 DI-M-2050  
 Manuals, Technical: General Style and Format Requirements  
 MIL-M-38784B  
 Manuals, Technical: Repair Parts and Special Tools List  
 MIL-STD-335  
 Manuals, Technical: General Style and Format Requirements  
 MIL-M-38784B  
 Markings for Aircrew Station Displays, Design and Configuration  
 of MIL-M-18012B  
 Materiel Objectives and Requirements AR 71-9  
 Materiel Acquisition Handbook AMC TRADOC PAM 70-2  
 MicroSaint  
 Military Training Programs MIL-STD-1379C  
 Military Personnel, Organization and Types of Transaction Codes  
 AR 680-29  
 Mockups, Aircraft, General Specifications for MIL-M-8650C  
 NBC Contamination Report DI-R-1781  
 Noise Measurement Report DI-H-1336  
 Noise Limits for Army Materiel MIL-STD-1474  
 Nuclear Survivability Design Report DI-R-1761A  
 Personnel Performance and Training Program AR 70-8  
 Personnel and Training Requirements DI-H-1300  
 Preparation of Statement of Work MIL-HDBK-245  
 Progress Report DI-H-5009A  
 Radioactive Material Data DI-H-1332A  
 Reading Level Requirements for Preparation of Technical Orders  
 MIL-STD-1752  
 Safety Design Requirements for Military Lasers and Associated  
 Support Equipment MIL-STD-1425  
 Safety Assessment Report DI-SAFT-80102  
 Safety Requirements for Military Lasers AR 385-9  
 Safety Color Code Markings and Signs AR 385-30  
 Safety Standards for Military Ground Vehicles MIL-STD-1180B  
 Scientific and Technical Reports DI-S-4057  
 Software Test Plans DI-MCCR-80014  
 Software Test Descriptions DI-MCCR-80015  
 Software Top Level Design Document DI-MCCR-80012  
 Software Test Procedures DI-MCCR-80016  
 Software Quality Assurance Plan DI-R-2174A  
 Software Test Report DI-MCCR-80017  
 Standards of Medical Fitness AR 40-501  
 Student's Training Course Guide DI-H-7071  
 Supply Support Methodology and Model  
 Surface Danger Area Data DI-H-1327A  
 Survivability Cost Effectiveness Trade-off Study Report  
 DI-R-21498A  
 Symbols to Supplement Text of Instruction Plates for Military  
 Vehicles MIL-STD-1271B  
 System/Design Trade Study Reports DI-S-3606  
 System Safety Program Plan DI-SAFT-80100  
 System Safety Engineering and Management AR 385-16

System Safety Hazard Analysis Report DI-SAFT-80101  
System Acquisition Policy and Procedures AR 70-1  
System Safety Program Plan Report DI-SAFT-80105  
System MANPRINT Management Plan (SMMP)  
System Safety Management Guide DA PAM 385-16  
System Safety Program Requirements MIL-STD-882  
Systematic Organizational Design  
Task Load Index (NASA-TLX)  
Task Analysis DOD-STD-1478(Draft)  
Task Analysis/Workload (TAWL) User's Guide - Version 3.0  
ARI-RP-90-15  
Task Inventory and Task Analysis Proposed Military Handbook  
MIL-HDBK-XXXX  
Technical Manuals/Commercial Literature DI-M-6153  
Technical Publications for Advanced Development Systems DI-M-6157  
Technical Manual Writing Handbook MIL-HDBK-63038(TM)  
Test and Evaluation During Development and Acquisition of  
Materiel AR 70-10  
Trainer Test Procedures and Results Report DI-T-25594C  
Training and Training Equipment Plan DI-H-7066  
Training Device Policies and Management AR 350-38  
Training Course/Curriculum Outline DI-H-7069  
Training Requirements Analysis System TRADOC Reg. 351-1  
Training Devices, Military, General Specifications for  
MIL-T-23991E  
Training Course Standards DI-ILSS-80047  
User Testing AR 71-3  
Validation Record (Technical Manuals) DI-M-6159  
Vulnerability Assessment Report DI-R-21482A  
WC Fielde Workload Consultant for Field Evaluation (V 2.0)  
Window/PANES: Workload/Performance Simulation  
Work Measurements MIL-STD-1567

# APPENDIX B Program Listing

```

* MANRRS Version 2.0
*
set procedure to manrrs
*
*
* Main Program Loop
----- *
do init                                && Initialize variables
do while .T.                           && Top of the loop
do menu_1                              && Draw the Main Menu
do disp_1                              && Fill in the record counts
do input_1                             && Get cat_1
do holdit                              && Tell the user to wait
do reccount                            && Count all the cat_1 records
do disp_1                              && Fill in the new record counts
do input_2                             && Get cat_2
do holdit                              && Tell the user to wait
do roundup                             && Find and display the records
enddo                                  && Bottom of the loop
*
-----
*
PROCEDURE INIT                          && Initialize variables
*
use manrrs
set status off
set scoreboard off
set talk off
set bell off
if file('c:\temp$$$.txt')
    erase c:\temp$$$.txt
endif
do menu_1                              && Set up the screen
do holdit                              && Tell user to wait a sec
public cvar1
public cvar2
public cvar3
public cvar4
public cvar5
public cvar6
public cvar7
public cvar8
public cvar9
public cvar10
public cvar11
public cvar12
public cvar13
public cvar14

```

```

public cvar15
public cvar16
public cvar17
public cvar18
public cat_1
public cat_2
public ans_1
public ans_2
public ans_3
public ans_4
public ans_5
public dom
public fil
public zip
public tvarx
cat_1 = space(1)                                && The MANPRINT category
selected
cat_2 = space(1)                                && The record category
selected
ans_1 = space(1)
ans_2 = space(1)
ans_3 = space(1)
ans_4 = space(1)
*
* Next, let's count the number of records in each MANPRINT domain
*
go top
tvar = 0
tvara = 0
tvarb = 0
tvarc = 0
tvard = 0
tvare = 0
tvarf = 0
tvarg = 0
tvarh = 0
do while .not. eof()
    tvar = tvar + 1                                && count of total no. of
records    if dom_1 = "1"                            && count of Manpower records
        tvara = tvara + 1
    endif
        if dom_2 = "1"                                && personnel
            tvarb = tvarb + 1
        endif
        if dom_3 = "1"                                && training
            tvarc = tvarc + 1
        endif
        if dom_4 = "1"                                && human factors
            tvard = tvard + 1
        endif
        if dom_5 = "1"                                && health hazard
            tvare = tvare + 1

```

```

endif
if dom_6 = "1"
tvarf = tvarf + 1          && system safety
endif
if dom_7 = "1"
tvarg = tvarg + 1          && spare
endif
if dom_8 = "1"
tvarh = tvarh + 1          && spare
endif
skip
enddo
*
* We have finished counting, now assign the values to the
variables.
*
cvar1 = tvara              && Number of Manpower records
cvar2 = tvarb              && Number of Personnel records
cvar3 = tvarc              && Number of Training records
cvar4 = tvarc              && Number of Human Factors
cvar5 = tvare              && Number of Health Hazard
cvar6 = tvarf              && Number of System Safety
cvar7 = tvar               && Total number of records
cvar18 = tvarg             && Number of non-specific
* Initialize the rest of the variables to zero.
cvar8 = 0
cvar9 = 0
cvar10 = 0
cvar11 = 0
cvar12 = 0
cvar13 = 0
cvar14 = 0
cvar15 = 0
cvar16 = 0
cvar17 = 0
*
RETURN &&-----
*
*
PROCEDURE HOLDIT
*
@ 22,0 say space(80)
@ 22,18 say "***** Working...please stand by *****"
*
RETURN &&-----
*
*

```

```

PROCEDURE MENU_1                                && Draws the Main Menu
go top
do header                                        && Draw the ARI header
@ 5,0 to 19,38
@ 5,39 to 19,79
@ 19,3 to 21,30 double
@ 19,42 to 21,70 double
@ 4,3 to 6,23 double
@ 5,4 say ' MANPRINT CATEGORY '
@ 6,32 say 'INDEX'
@ 7,32 say 'COUNT'
@ 6,73 say 'INDEX'
@ 7,73 say 'COUNT'
@ 4,42 to 6,62 double
@ 5,43 say ' RECORD CATEGORY '
@ 8,3 say ' A...MANPOWER'
@ 9,3 say ' B...PERSONNEL'
@10,3 say ' C...TRAINING'
@11,3 say ' D...HUMAN FACTORS'
@12,3 say ' E...HEALTH HAZARD'
@13,3 say ' F...SYSTEM SAFETY'
@15,3 say ' G...GENERAL'
@18,3 say ' Z...ALL RECORDS'
@ 8,43 say 'A...REGULATIONS'
@ 9,43 say 'B...PAMS & CIRCULARS'
@10,43 say 'C...REPORTS & GUIDES'
@11,43 say 'D...MIL HANDBOOKS'
@12,43 say 'E...MIL STANDARDS'
@13,43 say 'F...MIL SPECIFICATIONS'
@14,43 say 'G...DATA ITEM DESCRIPTIONS'
@15,43 say 'H...ANALYTIC TECHNIQUES'
@16,43 say 'I...DATABASES'
@18,43 say 'Z...ALL RECORDS'
@20,4 say ' CATEGORY SELECTED: '
@20,43 SAY ' CATEGORY SELECTED: '
*
*
do trailer
*
*
RETURN &&-----
*
*
```

PROCEDURE HEADER

```
*
*  Puts the text at top of screen
*
clear
@ 0,0 to 3,79 double
@ 1,28 say 'Army Research Institute'
@ 2,19 say 'MANPRINT Reference Retrieval System (V 2.0)'
```

```
*
*
RETURN &&-----
```

```
*
*
PROCEDURE TRAILER
```

```
*
*  Puts the text at bottom of screen
*
@ 23,0 to 23,79
@ 24,5 say 'Press Q to QUIT;  Press X to CANCEL'
```

```
*
*
RETURN &&-----
```

```
*
PROCEDURE MENU_2                                && All records output choice
```

```
*
@ 4,0 clear
@ 5,0 to 11,38
@ 4,3 to 6,23 double
@ 5,4 say ' OUTPUT OPTIONS      '
@ 8,3 say 'A...VIEW ONE AT A TIME ON SCREEN'
@ 9,3 say 'B...SEND ALL TO PRINTER'
@10,3 say 'C...SAVE ALL TO DISK'
```

```
*
do trailer
*
RETURN &&-----
```

```
*
*
```

```

PROCEDURE MENU_3                                && Individual record output
choice *
do header
@ 4,0 clear
@ 5,0 to 11,38
@ 4,3 to 6,23 double
@ 5,4 say ' OUTPUT OPTIONS '
@ 8,3 say 'A...VIEW NEXT RECORD ON SCREEN'
@ 9,3 say 'B...SEND THIS RECORD TO PRINTER'
@10,3 say 'C...SAVE THIS RECORD TO DISK'
do trailer
*
*
RETURN &&-----
*
*
PROCEDURE PRINTALL
*
@ 22,0 say space(80)
@ 22,5 SAY 'Printing report...please stand by'
set device to print
  if tvarx = 1 then
    @ 0,22 say 'Army Research Institute'
    @ 2,17 say ' MANPRINT Reference Retrieval System'
    @ 3,30 say date()
    @ 5,0 say
'=====
=====
endif
* Now, we print it out
rowx = tvarx * 11 - 4
@ rowx,0 say 'Title      : ' + trim(title_1)
@ rowx+1,0 say '          : ' + trim(title_2)
@ rowx+2,0 say 'Date      : ' + trim(date)
@ rowx+3,0 say 'ID No.    : ' + trim(id_no)
@ rowx+4,0 say 'POC/SOURCE: ' + trim(poc_1)
@ rowx+5,0 say '          : ' + trim(poc_2)
@ rowx+6,0 say 'Comments  : ' + trim(com_1)
@ rowx+7,0 say '          : ' + trim(com_2)
@ rowx+8,0 say
'-----
-----
@ rowx+9,0 say ' '
tvarx = tvarx + 1                                && increment the record counter
if tvarx > 5 .or. eof()
  eject
  tvarx = 1
endif
set device to screen
*
RETURN &&-----

```



```

PROCEDURE FILEALL
*
if file('temp$.txt')                                && Get rid of old file
    erase temp$.txt
endif
copy to temp$.txt next 1 type delimited with blank
run copy c:\temp$$$.txt + temp$.txt c:\temp$$$.txt > null: &&
Append to the permanent file
*
RETURN &&-----
*
PROCEDURE INPUT_1                                    && Get value for cat_1
*
@ 22,0 say space(80)
@ 22,5 say 'Enter letter for MANPRINT Category: '
@ 20,24 get ans_1
read
ans_1 = upper(ans_1)
do case                                             && Do input validity check
    case ans_1 = "A"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "B"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "C"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "D"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "E"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "F"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "G"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "Z"
        @ 20,24 say upper(ans_1) picture "A"
        return
    case ans_1 = "Q"
        do checkout
        do input_1
        return
    otherwise
        do input_1
        return
endcase ans_1
RETURN &&-----

```

```

PROCEDURE INPUT_2                                && Get value for cat_2
*
@ 22,0 say space(80)
@ 22,5 say 'Enter letter for Record Category: '
@ 20,64 get ans_2
read
ans_2 = upper(ans_2)
cat_2 = upper(ans_2)
do case                                          && Do input validity check
  case ans_2 = "A"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "B"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "C"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "D"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "E"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "F"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "G"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "H"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "I"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "Z"
    @ 20,24 say upper(ans_2) picture "A"
    return
  case ans_2 = "Q"
    do checkout
    do input_2
    return
  otherwise
    do input_2
    return
endcase ans_2
*
RETURN
&&-----
*
```

# ``` PROCEDURE INPUT_3 ```

```
*
@ 22,0 say space(80)
@ 22,5 say 'Enter letter for your choice: '
@ 22,40 get ans_3
read
ans_3 = upper(ans_3)
do case                                && Do input validity check
  case ans_3 = "A"
    @ 22,40 say upper(ans_3) picture "A"
    return
  case ans_3 = "B"
    @ 22,40 say upper(ans_3) picture "A"
    return
  case ans_3 = "C"
    @ 22,40 say upper(ans_3) picture "A"
    return
  case ans_3 = "X"
    @ 22,40 say upper(ans_3) picture "A"
    zip = 1
    return
  case ans_3 = "Q"
    do checkout
    do input_3
    return
  otherwise
    do input_3
    return
endcase ans_3
```

```
*
RETURN
```

```
&&-----
```

```
*
```

```
*
```

# ``` PROCEDURE INPUT_4 ```

```
*
@ 22,0 say space(80)
@ 22,5 say 'Enter letter for your choice: '
@ 22,40 get ans_4
read
ans_4 = upper(ans_4)
do case                                && Do input validity check
  case ans_4 = "A"
    @ 22,40 say upper(ans_4) picture "A"
    return
  case ans_4 = "B"
    @ 22,40 say upper(ans_4) picture "A"
    return
  case ans_4 = "C"
    @ 22,40 say upper(ans_4) picture "A"
    return
  case ans_4 = "X"
```

```

    @ 22,40 say upper(ans_4) picture "A"
    zip = 1
    return
case ans_4= "Q"
    do checkout
    do input_4
    return
otherwise
    do input_4
    return
endcase ans_4
*
RETURN &&-----
*
*
PROCEDURE CHECKOUT
*
ans_5 = .F.
@ 22,0 say space(80)
@ 22,5 say 'Quit...Are you sure? (Y/N):'
@ 22,40 get ans_5
read
if (ans_5)
    quit
else
    @ 22,0 say space(80)
RETURN &&-----
*
PROCEDURE DISP_1
*
@ 8,33 say cvar1 picture "9999"
@ 9,33 say cvar2 picture "9999"
@10,33 say cvar3 picture "9999"
@11,33 say cvar4 picture "9999"
@12,33 say cvar5 picture "9999"
@13,33 say cvar6 picture "9999"
@15,33 say cvar18 picture "9999"
@18,33 say cvar7 picture "9999"
*
@ 8,74 say cvar8 picture "9999"
@ 9,74 say cvar9 picture "9999"
@10,74 say cvar10 picture "9999"
@11,74 say cvar11 picture "9999"
@12,74 say cvar12 picture "9999"
@13,74 say cvar13 picture "9999"
@14,74 say cvar14 picture "9999"
@15,74 say cvar15 picture "9999"
@16,74 say cvar16 picture "9999"
@18,74 say cvar17 picture "9999"
RETURN &&-----
PROCEDURE RECCOUNT
*

```

```

* Look at each record and see if it is in the selected category.
* If it is, then send it out to be counted by RECSEL.
* But, first see if we have already counted the entries for
* this MANPRINT category.
if upper(ans_1) = upper(cat_1)
    return
endif
cat_1 = upper(ans_1)
* This must be a new category, so zero out the counters
cvar8 = 0
cvar9 = 0
cvar10 = 0
cvar11 = 0
cvar12 = 0
cvar13 = 0
cvar14 = 0
cvar15 = 0
cvar16 = 0
cvar17 = 0
*
go top
do while .not. eof()
    if upper(ans_1) = "A" .and. dom_1 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "B" .and. dom_2 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "C" .and. dom_3 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "D" .and. dom_4 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "E" .and. dom_5 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "F" .and. dom_6 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "G" .and. dom_7 = "1"
        do RECSEL
    endif
    if upper(ans_1) = "Z"
        do RECSEL
    endif
    skip
enddo
RETURN
&&-----

```

# ``` PROCEDURE RECSEL ```

```

do case
  case rec_type = 'A'
    cvar8 = cvar8 + 1
  case rec_type = 'B'
    cvar9 = cvar9 + 1
  case rec_type = 'C'
    cvar10 = cvar10 + 1
  case rec_type = 'D'
    cvar11 = cvar11 + 1
  case rec_type = 'E'
    cvar12 = cvar12 + 1
  case rec_type = 'F'
    cvar13 = cvar13 + 1
  case rec_type = 'G'
    cvar14 = cvar14 + 1
  case rec_type = 'H'
    cvar15 = cvar15 + 1
  case rec_type = 'I'
    cvar16 = cvar16 + 1
endcase rec_type
cvar17 = cvar17 + 1

```

```

*
*

```

```
RETURN
```

```
&&-----*
```

```
*
```

## ``` PROCEDURE ROUNDUP ```

```
*
```

```

do header
do menu_2                                && Draw the output menu
zip = 0
tvarx = 1
do input_3                                && Get ans_3 (output choice)
if zip = 1
  return
endif
*
go top
do while .not. eof()
  do holdit
    if upper(ans_1) = "A" .and. dom_1 = "1"
      do RECOUT
    endif
    if upper(ans_1) = "B" .and. dom_2 = "1"
      do RECOUT
    endif
    if upper(ans_1) = "C" .and. dom_3 = "1"
      do RECOUT
    endif
    if upper(ans_1) = "D" .and. dom_4 = "1"
      do RECOUT
    endif
  endif
endif

```

```

endif
if upper(ans_1) = "E" .and. dom_5 = "1"
do RECOUT
endif
if upper(ans_1) = "F" .and. dom_6 = "1"
do RECOUT
endif
if upper(ans_1) = "G" .and. dom_7 = "1"
do RECOUT
endif
if upper(ans_1) = "Z"
do RECOUT
endif
if zip = 1          && Skip-back flag got set
return
endif
skip
enddo
*
do holdit
*
RETURN &&-----
*
*
PROCEDURE RECOUT
*
*
if upper(ans_2) = rec_type .or. upper(ans_2) = "Z"
do case
case ans_3 = "A"
do showem
case ans_3 = "B"
do printall
case ans_3 = "C"
do fileall
endcase ans_3
endif
*
RETURN &&-----
*
*
```

# PROCEDURE SHOWEM

```

*
*
zip = 0                                && clear the skip-back flag
do menu_3                              && Show records on screen
*
    Now, lets print the record block
    @ 14,2 say 'Title      : ' + trim(title_1)
    @ 15,2 say '          : ' + trim(title_2)
    @ 16,32 say 'ID Number : ' + trim(id_no)
    @ 16,2 say 'Date      : ' + trim(date)
    @ 17,2 say 'POC       : ' + trim(poc_1)
    @ 18,2 say '          : ' + trim(poc_2)
    @ 19,2 say 'Comments  : ' + trim(com_1)
    @ 20,2 say '          : ' + trim(com_2)
do input_4                             && continue/print/file/quit
do case
    case upper(ans_4) = 'A'             && Continue display to screen
        return
    case upper(ans_4) = 'B'
        do print_1                     && Send 1 record to
printer      case upper(ans_4) = 'C'
        do file_1                      && Send 1 record to disk
        case upper(ans_4) = 'X'        && Set the skip-back flag
            zip = 1                    && and return
        return
    endcase ans_4
*
RETURN &&-----
*
*
PROCEDURE FILE_1
*
*
if file('temp$.txt')                  && Get rid of old file
    erase temp$.txt
endif
copy to temp$.txt next 1 type delimited with blank
run copy c:\temp$$$.txt + temp$.txt c:\temp$$$$.txt > null: &&
Append to the permanent file
*
*
RETURN
&&-----
*
*

```



```

PROCEDURE PRINT_1
*
*
@ 22,0 say space(80)
@ 22,5 SAY 'Printing report...please stand by'
set device to print
  if tvarx = 1 then
    @ 0,22 say 'Army Research Institute'
    @ 2,17 say ' MANPRINT Reference Retrieval System'
    @ 3,36 say date()
    @ 5,0 say
'=====
=====
    endif
*
* Now, we print it out
rowx = tvarx * 11 - 4
@ rowx,0 say 'Title : ' + trim(title_1)
@ rowx+1,0 say ' : ' + trim(title_2)
@ rowx+2,0 say 'Date : ' + trim(date)
@ rowx+3,0 say 'ID No. : ' + trim(id_no)
@ rowx+4,0 say 'POC/SOURCE: ' + trim(poc_1)
@ rowx+5,0 say ' : ' + trim(poc_2)
@ rowx+6,0 say 'Comments : ' + trim(com_1)
@ rowx+7,0 say ' : ' + trim(com_2)
@ rowx+8,0 say
'-----
-----
*
tvarx = tvarx + 1 && increment the record counter
if tvarx > 5 .or. eof()
  eject
  tvarx = 1
endif
set device to screen
*
*
RETURN &&-----

```